**Unit 10 Map (Gene Regulation and Biotechnology)**

Ms. Ottolini, AP Biology

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| **Topic** | **Learning Target** | **Where did I learn this?**  (What resources should I use to study?) | **How well do I know this?**  (scale of 1 to 3, with 3 indicating a high level of understanding) |
| Gene Regulation | 1. I can identify the purpose of gene regulation in prokaryotic and eukaryotic cells. |  |  |
| 2. I can explain how inducible and repressible operons are regulated in prokaryotic cells. |  |  |
| 3. I can compare / contrast the different levels of gene regulation in eukaryotic cells. |  |  |
| Biotechnology A | 4. I can describe the purpose and methods of gel electrophoresis and analyze electrophoresis results. |  |  |
| 5. I can describe the purpose and methods of polymerase chain reaction (PCR). |  |  |
| Biotechnology B | 6. I can describe the purpose and methods of bacterial transformation and analyze bacterial transformation results. |  |  |
| 7. I can provide examples of the practical uses of biotechnology, including insulin production and cloning. |  |  |